

Blue Bird BBCV (Vision)/GM 8.1L Propane Engine w/single serpentine belt

Complaint – The belt tensioner nubs are running too close showing that the tensioner +/or

belt are worn. A slight "chirp" may be heard on shutdown of the engine - Please

see Figure #1 & 2.

Cause – If the belt or the tensioner has recently been replaced it may be the improper

part, if not the belt +/or tensioner may be worn.

Correction – If the belt +/or tensioner have recently been replaced and the "nubs" of the

tensioner are still close you need to make sure that the proper parts have been

used. See the text box below-

PLEASE NOTE – After checking with Dayco who provided the belt set-up on this unit there should be 14 degrees between the nubs of the tensioner which equates to approximately

1/2" as shown in Figure #3.

PLEASE NOTE - Figure #4 also gives the proper belt routing-





Figure #1 Figure #2



PROPER PART NUMBERS

TENSIONER PART #1622-6300-01

BELT-GATES PART #5061360

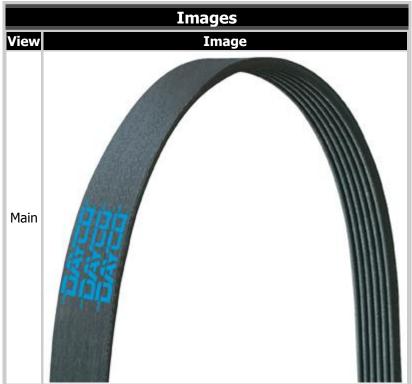
IDLER PULLEY #6 – DATCO #89106

Figure #3

PLEASE NOTE – WE FOUND THAT THERE IS A DIFFERENCE IN BELT MANUFACTURES ALSO AS SHOWN BELOW THE DAYCO SPEC ON THE LENGTH IS 136.02" WHERE THE NAPA BELT WHO IS MADE BY GATES IS 136.5" WHICH COULD EFFECTIVELY CAUSE AN ISSUE WITH THE BELT TENSIONER POSITIONING –THEREFORE IT IS STRESSED THAT OEM PARTS SHOULD BE REPLACED WITH OEM PARTS

Part#: 5061360

Part Specifications	
Attributes	Specifications
Backside Material	Rubber
Compound	EPDM, Aramid Reinforced
Effective Length (in)	136.02
Metric Part	6PK3455
No of Ribs	6
Rib Depth	Standard
Rib Profile	Straight Rib
Thickness	.169
Top Width	.82





Part Number: NBH 25061360 Product Line: NAPA Belts & Hoses

Attributes:

Serpentine Belt Ribs: 6

Outside Circumference (in) : 136.5" Outside Circumference (mm) : 3467 mm

Section: K Top Width (in): .807" Top Width (mm): 20 mm

Features and Benefits: Import or Domestic, Car or Truck, Every Vehicle Can Depend On The Superior Quality & Precision Fit of Micro-V AT (Advanced Technology) Belts.

Advanced Technology Provides Up To 50% Longer Life Than Retail Belts & Can Restore Your Vehicle To Factory-Original Condition & Ensure Optimal Vehicle Performance.

Micro-V AT Belts Provide Peak Operating Performance While Delivering The Highest Value Available. Special Belt Constructions Eliminate Belt Noise, Reduce Tension Loss & Solve Problem Drive Applications.

REVISION "B" - DATE 9-18-12

After replacing the belt and tensioner as previously discussed it was determined that the tensioner would again be running too close to the nubs which was not recommended. Working with Dayco it was determined that idler #6 in the **Figure** #4 should be replaced with a slightly larger pulley, Dayco #89106. Once this is done and the unit ran for a couple of days you can see that the tensioner is almost perfectly centered as it should be.

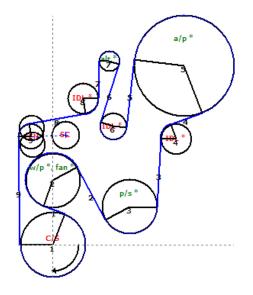




Figure #4

Figure #5



Contact Our Service Department With Any Questions

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REVISION "C" – DATE 2/7/2014

After concern was still raised that the "NUBS" of the tensioner at times would contact each other, PowerTrain Integration who did the "FEAD" set-up on the 8.1L engine was contacted and informed of the concern. After getting the requested information from them, it was determined that it was not causing any issue. Attached please find a copy of their findings.

ALL of our Tech Tips can be found on the New York Bus Sales website at http://www.newyorkbussales.com/pages/bulletins.cfm
Or at the New York Head Mechanic website at http://www.nyhma.org/viewforum.php?f=2&start=0



07 February, 2014

John Johnston Operations Manager New York Bus Sales 7765 Lakeport Road Chittenango, New York 13037

Mr. Johnston,

I have reviewed your description and video of the operation of the front-end accessory drive (FEAD) tensioner on the 8.1L engine we supplied to Blue Bird Corporation. The tensioner is functioning as intended to keep tension in the belt drive even though there is incidental contact of the tensioner arm casting against the tensioner body 'stop' feature. This is not causing a problem with the FEAD system. I recommend visual reviews on at least a weekly basis to ensure the tensioner is operating properly as part of the normal inspections the driver or maintenance staff already performs. The inspection is to ensure the tensioner and belt is intact and the belt is routed properly.

With regards,

Stephen Miller, P.E.

CC:

John Johnston, Blue Bird Corporation